

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: MILLEN POND	Lake Area (ha): 63.13
Town: WASHINGTON	Maximum depth (m): 12.6
County: Sullivan	Mean depth (m): 5.0
River Basin: Connecticut	Volume (m ³): 3185500
Latitude: 43°10'03" N	Relative depth: 1.4
Longitude: 72°07'14" W	Shore configuration: 1.78
Elevation (ft): 1582	Areal water load (m/yr): 3.61
Shore length (m): 5000	Flushing rate (yr ⁻¹): 0.70
Watershed area (ha): 336.7	P retention coeff.: 0.71
% watershed ponded: 0.0	Lake type: natural w/dam

BIOLOGICAL:

7 January 1998

24 June 1997

DOM. PHYTOPLANKTON (% TOTAL)	#1	DINOBRYON 45%	DINOBRYON 90%
	#2	SYNURA 30%	MALLOMONAS 5%
	#3	ASTERIONELLA 15%	PERIDINIUM 5%
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			0.92
DOM. ZOOPLANKTON (% TOTAL)	#1	CALANOID COPEPOD 43%	CALANOID COPEPOD 50%
	#2	CILIATE SPP 23%	
	#3	BOSMINA 14%	
ROTIFERS/LITER		8	24
MICROCRUSTACEA/LITER		32	49
ZOOPLANKTON ABUNDANCE (#/L)		56	78
VASCULAR PLANT ABUNDANCE			Sparse
SECCHI DISK TRANSPARENCY (m)			7.5
BOTTOM DISSOLVED OXYGEN (mg/L)		10.4	9.0
BACTERIA (E. coli, #/100 ml)	#1		
	#2		
	#3		

SUMMER THERMAL STRATIFICATION:

stratified

Depth of thermocline (m): 6.0
Hypolimnion volume (m³): 227000
Anoxic volume (m³): None

CHEMICAL:

Lake: MILLEN POND

Town: WASHINGTON

	7 January 1998		24 June 1997		
DEPTH (m)	3.0	6.0	2.0	7.0	11.0
pH (units)	6.0	6.0	6.3	6.3	6.1
A.N.C. (Alkalinity)	0.9	1.5	1.5		
NITRATE NITROGEN	< 0.05	< 0.05	< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN	0.30	0.10	< 0.10	0.10	0.10
TOTAL PHOSPHORUS	0.005	0.006	0.006	0.007	0.010
CONDUCTIVITY (μ mhos/cm)	36.7	35.9	33.4	32.9	33.1
APPARENT COLOR (cpu)	< 5	< 5	< 5	< 5	7
MAGNESIUM			0.44		
CALCIUM			1.6		
SODIUM					
POTASSIUM			0.50		
CHLORIDE	6	6	5		5
SULFATE	4	4	4		4
TN : TP	60	17			10
CALCITE SATURATION INDEX			4.6		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1997

D.O. S.D. PLANT CHL TOTAL CLASS

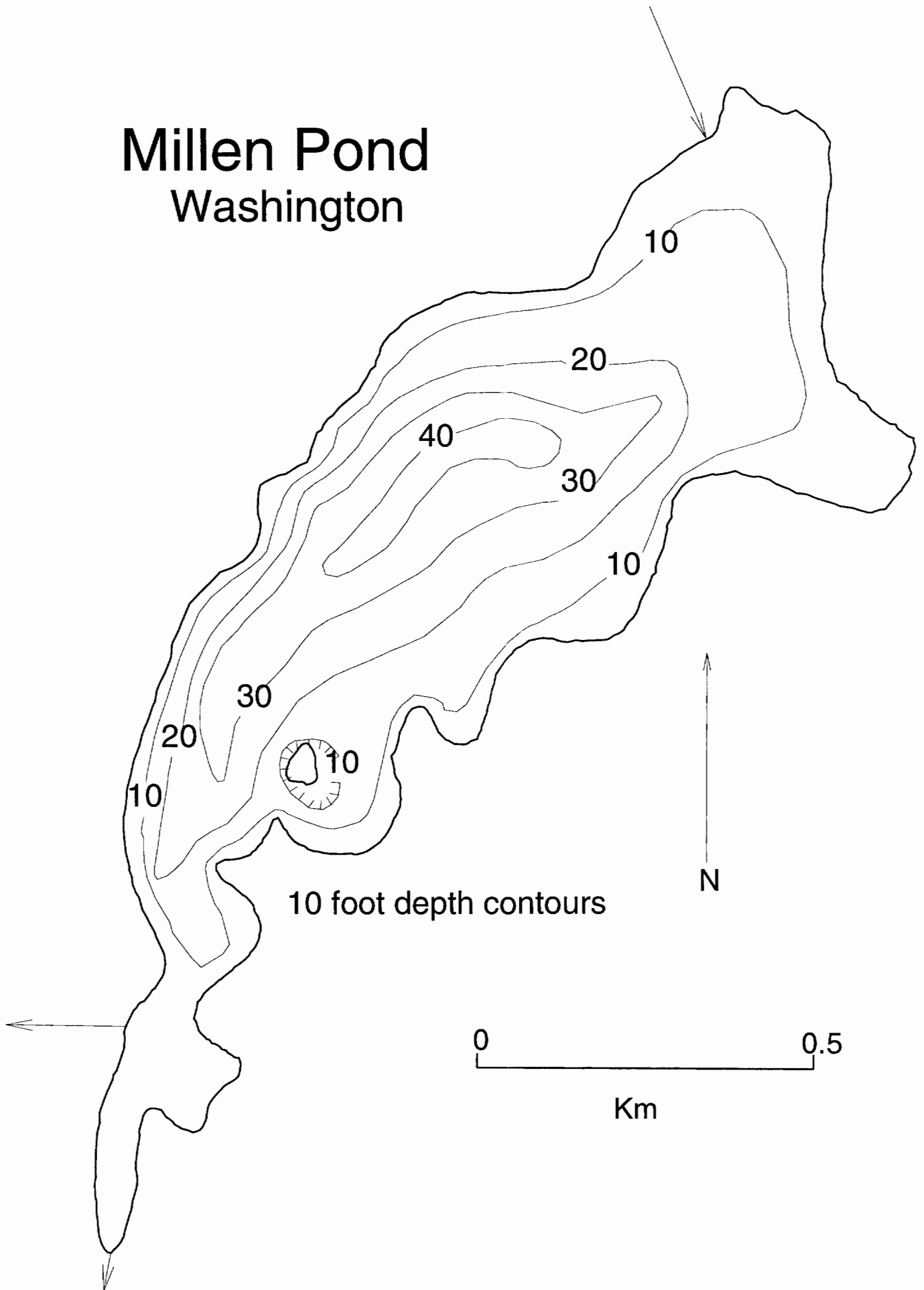
0	0	0	0	0	Oligo.
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COMMENTS:

1. Millen Pond was previously surveyed and classified in 1977 and 1984. It was rated oligotrophic in all three years. It has participated in the Volunteer Lake Assessment Program since 1995 and has demonstrated good, stable water quality over the four year period.
2. Millen Pond is a crystal clear, moderately acidic oligotrophic pond with low buffering capacity (ANC). It has been sampled since 1983 as part of the acid outlet program and has demonstrated low but stable pH and ANC values over that period. Lower than normal ANC values were recorded over the last three years (1997-99).
3. Good, gravel-packed boat launch site was available for public access.

Millen Pond

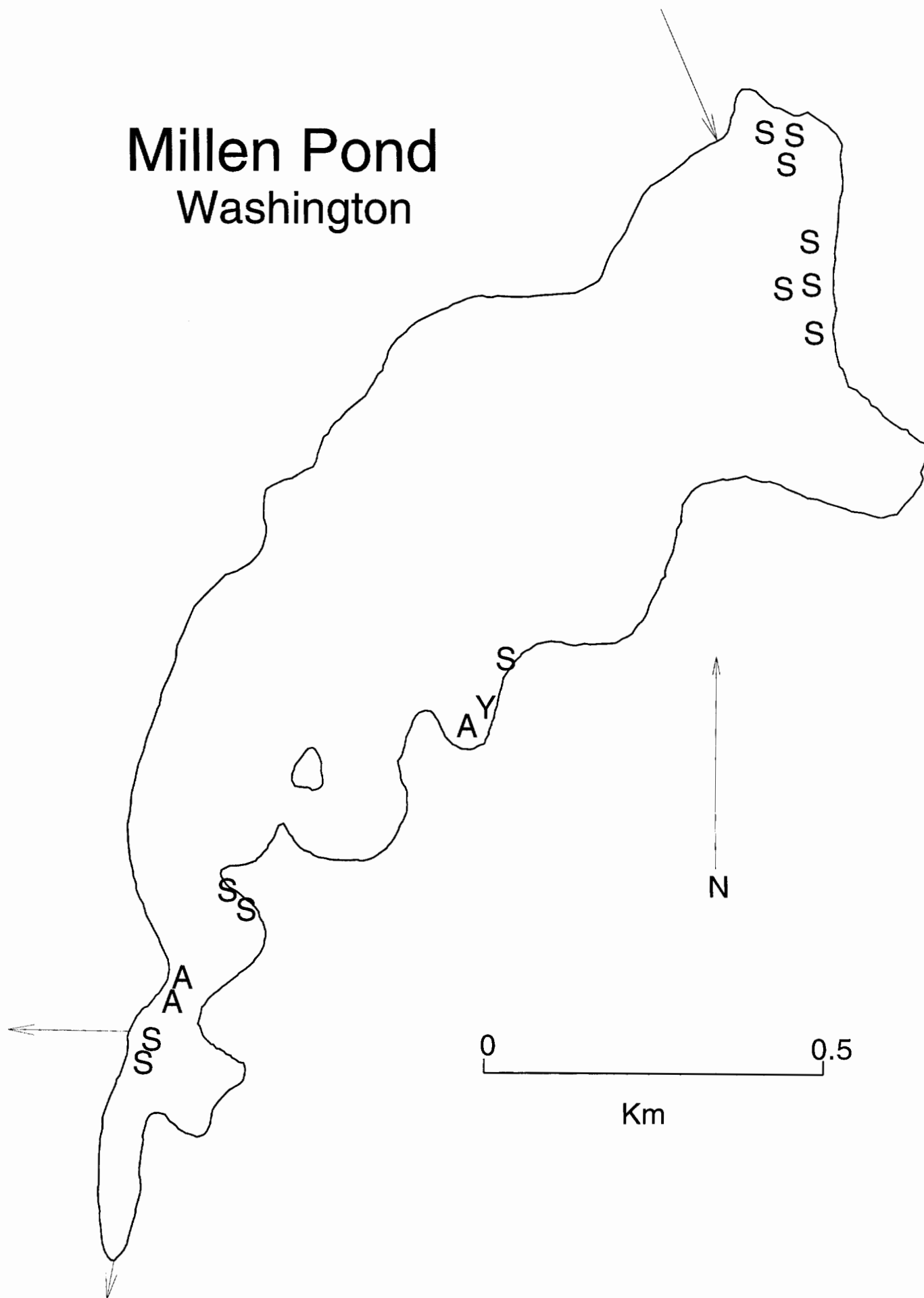
Washington



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Millen Pond

Washington



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